AMENDMENTS TO THE CLAIMS

Please amend the claims as they currently stand so that they are in accord with the following listing of the claims:

Claim 1 (previously presented): A compact multi-polarized antenna for transmitting and/or receiving radio frequency (RF) signals, said antenna comprising:

at least two radiative antenna elements each having a first end and a second end, and wherein said second ends of said radiative antenna elements are electrically connected at an apex point and are each disposed outwardly away from said apex point at an acute angle relative to and on a first side of an imaginary plane intersecting said apex point, and wherein said acute angle between each of said radiative antenna elements and said imaginary plane is between 1 degree and 89 degrees; and

an electrically conductive, non-planar ground reference located at and/or to a second side of said imaginary plane.

Claim 2 (original): The antenna of claim 1 further comprising a dielectric material serving to mechanically connect, at least in part, said radiative antenna elements to said ground reference while electrically insulating said radiative antenna elements from said ground reference.

Claim 3 (original): The antenna of claim 2 further comprising an electrical conductor electrically connected to said radiative antenna elements at said apex point and extending away from said apex point toward a ground reference side of said antenna through said dielectric material to allow connection to a transmission line for interfacing said radiative antenna elements to a radio frequency transmitter and/or receiver.

Claim 4 (original): The antenna of claim 1 further comprising an electrical connector to allow connection of said radiative antenna elements and said ground reference to a transmission line.

Claim 5 (original): The antenna of claim 1 wherein said at least two radiative antenna elements comprise conductive wound coils each tuned to a predefined radio frequency.

Claim 6 (original): The antenna of claim 1 wherein each of said radiative antenna elements are substantially linear and have a physical length determined by a pre-defined radio frequency.

Claim 7 (cancelled):

Claim 8 (original): The antenna of claim 1 wherein said ground reference comprises a conical shaped conductor having a side length that is about ¼ wavelength or more of a tuned radio frequency.

Claim 9 (original): The antenna of claim 1 wherein said ground reference comprises a cylindrical shaped conductor having a length of about ¼ wavelength of a tuned radio frequency.

Claim 10 (original): The antenna of claim 1 wherein said ground reference comprises an outer conductor of a coaxial connector.

Claim 11 (original): The antenna of claim 1 further comprising a mounting mechanism to allow mounting of said antenna to another device or structure.

Claim 12 (original): The antenna of claim 1 wherein said radiative antenna elements are equally spaced in angle circumferentially around 360 degrees.

Claim 13 (previously presented): A method to construct a compact multi-polarized antenna for transmitting and/or receiving radio frequency (RF) signals, said method comprising:

generating at least two radiative antenna elements each having a first end and a second end and each being tuned to a predetermined radio frequency;

electrically connecting said second ends of said radiative antenna elements at an apex point such that each radiative antenna element is disposed outwardly away from said apex point at an acute angle relative to and on a first side of an imaginary plane

intersecting said apex point, and wherein said acute angle between each of said radiative antenna elements and said imaginary plane is between 1 degree and 89 degrees; and

positioning an electrically conductive, non-planar ground reference at and/or to a second side of said imaginary plane.

Claim 14 (original): The method of claim 13 further comprising mechanically connecting said radiative antenna elements to said ground reference using at least a dielectric material to electrically insulate said radiative antenna elements from said ground reference.

Claim 15 (original): The method of claim 14 further comprising connecting an electrical conductor to said radiative antenna elements at said apex point such that said electrical conductor extends away from said apex point toward a ground reference side of said antenna and through said dielectric material to allow connection to a transmission line for interfacing said radiative antenna elements to a radio frequency transmitter and/or receiver.

Claim 16 (original): The method of claim 13 further comprising connecting an electrical connector to said radiative antenna elements and said ground reference to allow connection of said antenna to a transmission line.

Claim 17 (original): The method of claim 13 wherein said at least two radiative antenna elements comprise conductive wound coils.

Claim 18 (original): The method of claim 13 wherein said ground reference comprises a conical shaped conductor having a side length of about ¼ wavelength of said tuned radio frequency.

Claim 19 (original): The method of claim 13 wherein said ground reference comprises a cylindrical shaped conductor having a length of about ¼ wavelength of said tuned radio frequency.

Claim 20 (original): The method of claim 13 wherein said ground reference comprises an outer conductor of a coaxial connector.

Claim 21 (original): The method of claim 13 wherein generating each of said at least two radiative antenna elements comprises cutting a substantially linear conductive material to a predetermined physical length.

Claim 22 (original): The method of claim 13 wherein generating each of said at least two radiative antenna elements comprises winding a coil of conductive material to a predetermined electrical length.

Claim 23 (original): The method of claim 13 wherein said predetermined radio frequency for each of said radiative antenna elements is substantially the same for each of said radiative antenna elements.

Claim 24 (original): The method of claim 13 wherein said predetermined radio frequency for each of said radiative antenna elements is substantially different for each of said radiative antenna elements.

Claim 25 (cancelled):

Claim 26 (original): The method of claim 13 further comprising connecting a mounting mechanism to said antenna to allow mounting of said antenna to another device or structure.

Claim 27 (original): The method of claim 13 wherein said radiative antenna elements are equally spaced in angle circumferentially around 360 degrees.

Claim 28 (original): The method of claim 13 further comprising mechanically connecting a motor to said multi-polarized antenna to allow rotation of said multi-polarized antenna about a defined axis of said antenna.

Claim 29 (cancelled):

Claim 30 (new): A compact multi-polarized antenna for transmitting and/or receiving radio frequency (RF) signals, said antenna comprising:

at least two radiative antenna elements each having a first end and a second end, and wherein said second ends of said radiative antenna elements are electrically connected at an apex point and are each disposed outwardly away from said apex point at an acute angle relative to and on a first side of an imaginary plane intersecting said apex point, and wherein said acute angle between each of said radiative antenna elements and said imaginary plane is between 1 degree and 89 degrees; and

an electrically conductive, cylindrically-shaped ground reference located at and/or to a second side of said imaginary plane.

Claim 31 (new): A method to construct a compact multi-polarized antenna for transmitting and/or receiving radio frequency (RF) signals, said method comprising:

generating at least two radiative antenna elements each having a first end and a second end and each being tuned to a predetermined radio frequency;

electrically connecting said second ends of said radiative antenna elements at an apex point such that each radiative antenna element is disposed outwardly away from said apex point at an acute angle relative to and on a first side of an imaginary plane intersecting said apex point, and wherein said acute angle between each of said radiative antenna elements and said imaginary plane is between 1 degree and 89 degrees; and

positioning an electrically conductive, cylindrically-shaped ground reference at and/or to a second side of said imaginary plane.